

Abstract of the Disclosure

A method corrects an adaptively sampled distance field of a model. The adaptively sampled distance field includes a multiple of cells. Each cell stores distance values at vertices of the cell. The cells include interior cells, surface cells, and exterior cells, and neighboring cells have a common edge. Selected cells are marked as unprocessed cells, and the surface cells as marked as processed cells. A particular vertex of each unprocessed cell is marked as a minimum vertex if it has a minimum absolute value distance value. The unprocessed cells in an ascending order of the minimum vertices are further processed by appending, for each common edge of each unprocessed cell, distance values of neighboring processed cells to the common edge, adjusting the distance values of the vertices of the unprocessed cell according to the appended distance values of the edges and the distance values of the vertices, and marking the unprocessed cell as processed.